



Your University

1944



Robert Newton, President of the University of Alberta.



April 24, 1944.

DEAR PROSPECTIVE STUDENT:

This bulletin is addressed to you. The people of Alberta have provided opportunities for higher education and professional training that you should know about. In an increasing number of occupations (including many war activities) preference nowadays is given to university graduates. As a high school pupil, you are beginning to think seriously about how to make the most of your life, and you will want to consider whether university education is a necessary part of the preparation for what you would like to be and do.

This bulletin will give you glimpses of what the University of Alberta has done for the province, what life as a student here is like, and what the different faculties and schools have to offer you. Reading it through will help you to think more intelligently about the relative interest and merits of various professions, and to talk about them with your class-mates, your teachers, and your parents. If you want more information about some particular faculty or school that appeals to you, write for one of the calendars listed at the end of the bulletin, or send questions on specific points to the university officials also listed there.

If you are getting along well in your high school work, and have real zest for learning, you need not hesitate to plan on entering the University, even in wartime. Latest Dominion Government regulations authorize even male students ordinarily subject to military call-up to take at least one year in the University, and if they make a real success of their work here they may continue until graduation. The war effort itself requires a constant supply of well educated men and women, and these will be needed in the post-war period as never before.

If you want a university education but doubt whether you can afford it, look carefully for what the bulletin has to say about scholarships.

Yours sincerely,

Robert Newton

President

YOUR UNIVERSITY

To the High School Pupils of Alberta

"O young fresche folkis, be or sha."

CHAUNCEY

The University of Alberta is very much interested in you. It should be. The University itself belongs to your fathers and mothers; it belongs to you; it belongs to the people of Alberta. We who work at the University think it is a good university; we think the people of Alberta should be proud of it; we ourselves are proud to belong to it.

The main reason why the University is interested in boys and girls is that their education is one of the jobs which the people of the Province have given the University to do. Away back in 1905 when the Province was founded, the Fathers of the Province said, "One of the first things we need in this new country is a system of education and a university. This Province cannot get anywhere without educated men and women—and we shall need doctors, lawyers, ministers, school-teachers, all sorts of 'experts'." Therefore they started the University and gave it some jobs to do.

We think the University has done these jobs well. One assignment was to carry on research in agriculture and teach farmers how to get the best results from their farms. When the Provincial Government appointed a Survey Committee in 1941 to consider the present needs of the University, the Committee reported:

"From submissions made to the Committee it is possible to state, for example, that as a result of experiments conducted on cattle feeding about \$100,000 is annually being saved to cattle breeders in the Province; that research in connection with proteins, mineral and vitamin requirements of swine is saving in the neighborhood of \$1,000,000 per annum; that the production of Red Bobs and Canus wheat, adapted to Alberta conditions, is saving about \$5,000,000 per annum; that investigation into seed treatment has resulted in savings of \$1,000,000 per annum."

As the Province spends only about half a million dollars a year on the University, these savings alone, to say nothing of other

returns in Agriculture, amount to fourteen times the annual outlay by the Province. That is not a bad investment. But this is only a small part of the work done by the University. There are five Faculties besides Agriculture; and they are all valuable to the Province. There are also the Provincial Laboratories. Universities are expensive things to establish and maintain, but the money spent on the University of Alberta has been repaid many times over.

We think the University has a good record in educating students and in training engineers, doctors, lawyers, nurses, dietitians, business men, teachers, ministers, and all the other men and women that society needs for special tasks. You think so too! For in all probability the doctor who saved your life that time is a graduate of the University of Alberta, and the teachers who have so unselfishly given time and interest to your problems, and most of the other experts of one sort or another that have touched your life have gained their knowledge and their training at the University that you and your parents own. Through its graduates the University, though only thirty-five years old, already forms a network that touches at some point the life of every boy and girl in Alberta. As long as there are people in this Province, there will still be need for the University to carry on; and therefore the University is keenly interested in boys and girls—in the educated men and women, in the experts, of the world of tomorrow.

Further: the welfare of society depends on having the right man in the right place. A society simply cannot work at all with square pegs in round holes and round pegs in square holes. You would not ask a medical doctor to repair a farm tractor, unless he were a very unusual doctor; and you would not ask a garage mechanic to take out your tonsils, unless he were a very unusual mechanic; makeshift is not good enough for democracy. As the University is interested in the successful operation of democracy, it must try to make sure that all the girls and boys with the necessary ability who want to be doctors and who are needed in the profession shall become doctors. When the people of Alberta want to build a splendid hospital or school or water-power dam or bridge or railroad the day after tomorrow, the University wishes to be sure that the men available to do this work shall be the best that could have been selected from the girls and boys of today. And so with all the experts.

There is, however, one difficulty. A University course costs money, and many bright and talented young people may think that they cannot afford to go to the University. We hope to do something about that. In fact, a great deal is already being done about it. There are many scholarships offered by the Dominion and Provincial Governments. From Viscount Bennett we have just received ten scholarships a year for boys and girls in the Calgary district. And there are other sources of help. No able boy or girl who wants to go to the University ought to give up hope without reading the Calendar or asking a question or two of the Registrar; and, as time goes on, we shall do our best to make sure that no boy or girl who really wants to study and who can "make his grades" will have to do without a university education. What counts most in a democracy is not your father's pocket-book, but your own brains, though you must be willing to use them.

That brings us right down to the present and to yourself. What sort of school report did you take home last time? Did Dad like it? And did it really show what you can do? Can you do better? If you want to go to the University, prove your fitness by learning how to study; watch your grades—the record counts. The important thing is not the grades themselves, really, but the kind of foundation you are building for your career. Years later, when you are a lawyer, or a nurse, or an engineer, or a homemaker, or a businessman, your community may look to you to pull it out of a tight spot. Everything may depend on whether you have trained yourself to think clearly and honestly.

The University wants healthy, normal young men and women who are interested in sports as well as studies, in religion, in music and in all the other good things of life. What the world of tomorrow needs is good, sturdy men and women with healthy well-rounded interests, good characters, and brains.

Perhaps you remember those stanzas in Gray's *Elegy* in which he speaks of the waste of men and women in his day:

Perhaps in this neglected spot is laid
Some heart once pregnant with celestial fire;
Hands that the rod of empire might have sway'd,
Or wak'd to ecstasy the living lyre.

But Knowledge to their eyes her ample page
Rich with the spoils of time did ne'er unroll;
Chill Poverty repress'd their noble rage,
And froze the genial current of the soul.

Full many a gem of purest ray serene
The dark unfathomed caves of ocean bear;
Full many a flower is born to blush unseen,
And waste its sweetness on the desert air.

Some village Hampden that with dauntless breast
The little tyrant of his fields withstood;
Some mute inglorious Milton here may rest,
Some Cromwell guiltless of his country's blood.

Gray was not very happy about these things; in the twentieth century we shall reach only disaster if we too waste men and ability and brains. If there are some among the boys and girls of Alberta able to sway "the rod of empire", the world needs them, and the University must have a chance to educate them, to spread before their eyes the ample page of knowledge; if there are a few young Hampdens around, the world to-morrow needs them—in Parliament; and if there are Miltons in our Province, or hands that might "wake to ecstasy the living lyre", we at the University have been commissioned by the people to make sure, so far as we can, that they inherit their birthright.

But Hampdens and Miltons and Cromwells are as rare as they are precious. In no university in the world is genius anything but exceptional. Universities are intended to offer opportunity to young men and women of ambition and reasonable ability. It is for them that University courses are planned. It is for them that the following pages have been written.



A Glance Backward

"The poplars are felled."

COMPILED

The University of Alberta is almost as old as the Province of Alberta. Steps toward founding it were taken by the first legislature at its first session. The men in that legislature believed that in this new Province there must be not only public and high schools but also, for those who had the ability and the desire to go on, a place for more advanced studies, where young people might learn many things which would make their lives more interesting to themselves and more valuable to others, a place where they might be trained as doctors, engineers, farmers, teachers, lawyers.

Plans were made; land was bought. Teaching began in 1908 with forty-five students, four professors, and no buildings. The work was done in rented rooms in one of the city schools. Three years later, Athabaska Hall, the first University building, stood in a clearing among the poplar trees on the south bank of the Saskatchewan. Though substantial and fairly roomy, this solitary brick building did not look very much like a university. But a start had been made. At night in the valley, a few hundred yards away from this backwoods university, the coyotes could be heard barking. But the future was with the University, not with the coyotes.

In those first years the University was a small and very friendly society. The staff knew all the students and the students knew all the staff. There were few barriers. Dr. Tory, the President, the man who, more than any other person, made the University what it is today, used to tell with a chuckle how one of the early students called upon him and said he wished to ask his advice. "Yes, what about?" asked the President. "What kind of fountain pen would you advise me to buy, Doctor?" Everybody does not know everybody else now, and students buy their pens without consulting the President, but the University is still a friendly society bound together by common interests.

Things grow well in Alberta soil. More poplars were cut down, and soon a second building stood beside Athabasca Hall. A year later (1914), there was a third. And students came to fill them. By 1913 the staff numbered about twenty-five, and several young men and women could put "B.A. (Alberta)" after their names.

Then war came. The swift growth was halted. Classrooms began to empty. The names of undergraduates, graduates, and staff began to appear on the casualty lists. Nearly five hundred men served in the armed forces, and about eighty gave their lives. We had our share of honors, and among them a Victoria Cross. By 1918 the University, though only ten years old, had proud traditions and memories.

Immediately after the war the campus was crowded again. Besides new students in greater numbers than ever, there were returned men whose courses had been broken by the war. By the twenties there were five Faculties: Arts and Science, Applied Science, Agriculture, Medicine, and Law. Since then the Faculty of Education has been added. In 1933, before a second war had begun to call away many men (and women, too, this time) there were over two thousand students. The degrees granted by the different Faculties had won respect, and our graduates had proved their quality at older universities like Oxford and Harvard. Useful researches had been carried on in the University's laboratories. Two examples, out of many, may be given. Today we are so accustomed to the drone of aircraft in all temperatures that we forget that northern flying in winter was not possible until men had mastered the problem of starting and running aero engines at low temperatures. The University of Alberta helped in the solution of this problem shortly after the first great war. It has been estimated that Titan, a new harley made available to farmers this year, will save the Province hundreds of thousands of dollars a year. The University, though young in years as universities go, has given good service to the people of the Province. It has justified the faith of the founders.







Life at the University

"A map of my collegiate life"

"But to be young was very happy" - WINDHAM

The first universities were simply groups of students. They wanted to learn all sorts of things and gathered themselves in groups about individual learned men. As time passed, the men who knew and those who wanted to learn tended to meet in places like Oxford and to carry on their discussions at inns and taverns; there were no degrees, no rules except those of good breeding, and students and teachers alike lived largely by what we would call charity.

Fundamentally every university presents still the same picture. The University is still a place to which people come who want to know. The responsibility for their learning is their own. It is entirely up to the student himself he is treated as a man who knows what he wants. One student at the University of Alberta said that he failed because he "didn't get the idea." He was waiting for instructors to give him exact assignments, to tell him to read so many pages, to make charts and drawings and how to spend his time; he said that he found class periods very pleasant. When examinations came along they found him unprepared and he was requested to leave. Although he was requested to leave, he could still return a year later. He did return in the interval, he grew up a little and "got the idea." It is too bad that he should waste so much time every year the University tries to explain the idea, but there are always a few who do not get it. If they cannot get it there is no reason why they should be allowed to clutter up classes and waste time and money. The University wants always to be able to say to the people of Alberta: Your money is well spent.

Little by little through the centuries various types of university organization have grown up. The organization of the University of Alberta is similar to that of many universities on this continent and different from many of them in the old world. Although students pay fees, these are really only a guarantee that each individual means business, that he wants to learn something, actually the people of Alberta invest

in the University about half a million dollars a year. Without such support from the Province the University could not go on.

There are six Faculties and six Schools in the University. These are the Faculty of Arts and Science, Applied Science, Medicine, Agriculture, Law and Education, and the Schools of Commerce, Dentistry, Graduate Studies, Hospital Administration, Nursing, and Pharmacy. Affiliated with the University—that is associated with it and using some of its facilities at various points—are St. Stephen's College for Theological students of the United Church of Canada which serves also as a residence for other students, and St. Joseph's College a residence for Roman Catholic students. Mount Royal College in Calgary offers Junior College work in Arts and Science.

In the University there are forty-one departments. A single department like the Department of Physics may instruct students in several faculties in the case of Physics the Faculty of Arts and Science, Applied Science, Agriculture and Education. The Departments however vary greatly; the Department of Medicine and Clinical Medicine for example will have only students who belong to the Faculty of Medicine; the Department of Education on the other hand gives no instruction on the campus but attempts to spread widely the benefits of the University by radio, by means of circulating libraries and in many other ways. In the forty-one departments with three thousand instructors, the University does its best to be universal in offering instruction in the various branches of human knowledge.

But the University of Alberta is not a large one and there are many subjects in which no instruction can be obtained on this campus. For example no courses are offered in the Chinese and Russian languages although there are so important that these classes are now being considered and there are no courses in Music or the Fine Arts although the University does something in this direction through organ recitals, music clubs and the Department of Education's Summer School of Fine Arts at Banff. Nor does the University offer courses beyond those which lead to the Master's Degree. It can be said however that a sound fundamental training can be obtained here that will prepare students to specialize in most subjects.

Nor does the equipment of the University reveal that of the great universities of the world. It is estimated that buildings and equipment are now worth more than five million dollars. The Library which is, of course, the heart of the University

could not be mentioned in the same breath with the British Museum Library and the Library of Congress with their millions of books but our 75 000 volumes have been very carefully selected and may therefore be worth far more than the same number of books would ordinarily be worth. The value of a university is reckoned, after all not in terms of building and equipment but by the accomplishments of its graduates and the University of Alberta has a good name throughout the English speaking world.

No single student can study in all departments at the same time or even in all of them one after the other. Life is too short! Students coming to the University should, if possible know what they are coming for and register for the studies important to the careers they have chosen. If the decision has not been possible beforehand the student may ask for and receive advice at registration. The selection of a Faculty or School is the student's own responsibility but the University undertakes to determine what courses are desirable or necessary for a student of Medicine or Engineering or Law and so forth.

Some students find it difficult to adjust themselves to university conditions. In certain Faculties they may spend only two or three hours a day in the classroom for the rest of the day they are free. That is they are free in the sense that they decide for themselves what and when and for how long they study. But those who successfully pass into the second year are those who have treated their studies like a job and have faithfully done something like an eight hour day. During the first year attendance at classes is required but this required attendance is only for the benefit of those who find adjustment difficult in many senior classes attendance is optional. The system is designed simply to help those who desire help no university in the world can do anything for those who remain indifferent.

Student life at the University is organized by the students themselves under the general supervision of the Provost. The Provost's duties are really more advisory than disciplinary for students are treated not as pupils but as grown men and women. The Students Union which includes all the students on the campus annually elects its own Students Council to take care of their interests. Union fees are collected by the Bursar at the request of the Council along with academic fees. The Students Council publishes its own newspaper, *The Gateway*, all the work of which is done by students.

without any faculty supervision whatever. The Council also publishes each year a Directory of students and their addresses. It controls all campus clubs and organizations. These include clubs for sports such as swimming, football, hockey, basketball, etc. as well as the Philharmonic Society which annually produces a light opera. The Dramatic Society produces a full-length play usually in the early spring and also sponsors an evening of one-act plays in which the different classes compete. There are also the Debating Society which organizes debates within the University and with other universities, the Musical Club and many other organizations. The Committee on Student Affairs fixes the number and times of classes and other campus events and underwrites these expenses. The Public Science Club arranges for speakers representing different political parties to address student audiences. Many of these student activities have been curtailed during the war.

The chief reason for the curtailment of student activities during the war is that all male students are required by the Canadian Government as a condition under which they are permitted to attend the University at all to undertake some form of war training. Little may either take civilian training or participate in various war services. Consequently units of the Army, Navy and Air Force have been established on the campus to train students for service in these forces and as these duties take from four to six hours a week over and above the normal hours required for classes and study some peace-time student organizations and activities have had to be dropped.

For the duration of the war the three University residences for students have been given to the R.C.A.F. and units of the Navy and the Army are at present living in St. Joseph's College and St. Stephen's College. There is therefore now missing from the campus an important element of student life. However a number of fraternity houses and one co-operative house clustered about the campus offer accommodation to a fair number of students. Others must seek lodging in private homes in the city or with relatives.

An estimate of the expenses of students follows:

Fees—from \$107.50 to \$277.50 depending upon course and year

Board and Room and Laundry—estimated \$37.50 per month.

Amusements—estimated \$25.00 per semester.

Incidentals—estimated \$75.00 per semester.





It will be seen that the average falls at about \$600 a year. With the long vacation students can earn a good part of their college expenses, and the University maintains an employment service to help them find profitable summer jobs. There is no harm in doing one's college course in four years instead of three, that is, in staying out a year to earn money. On the whole, first year students are advised not to try to earn money in their spare time, but rather to give their whole energy to their studies. Having just left High School, they have the task of adjusting themselves to university ways, to university standards of accomplishment, to new methods of instruction and examination. They may endanger the success of their studies by taking outside work. As time goes on, more and more scholarships are becoming available to assist students who prove themselves worthy of help.



The Faculty of Arts and Science

Mary Rose —Is your father a crofter in the village?

Cameron —Yes, ma'am, when he is not at the University of Aberdeen.

Simon —My stars, does he go there too?

Cameron —He does so. We share a jerry small room between us.

Simon —Father and son. Is he going into the ministry also?

Cameron —Such is not his purpose. When he has taken his degree, he will return and be a crofter again.

Simon —In that case I don't see what he is getting out of it

Cameron —He is getting the grandest thing in the world out of it, he is getting education.

J. M. BARRIE

The meaning of the word Arts in the name of this Faculty is perhaps worth explaining. The ancient Romans distinguished between handicrafts, the skills or arts of slaves, and the liberal arts, which were the skills and accomplishments of men who were liberi, that is, free. We find some justification for this association of terms in the Bible also. "Ye shall know the truth, and the truth shall make you free." In mediæval universities, the term Arts was applied to certain branches of learning (for example, grammar) which might be considered skills or instruments to be used later in more advanced studies, such as theology, and also in shaping a more intelligent and cultured life.

In its early use, the term Arts included some studies to which now we should more readily apply the term Science. In more modern times, the study of the natural and physical world has come to fill a far larger place than it did in the universities of the Middle Ages. To this study the word Science (which originally merely meant knowledge) has come to be applied. Thus, in order to give a fair idea of the studies comprised in this Faculty, it is now called the Faculty of Arts and Science.

We now use the term Arts to include such studies as Philosophy, Language and Literature, History, Political Economy and Mathematics, all of which are also scientific in some aspects, and we use the term Science to include such studies as Chemistry, Physics, Zoology, Botany, Geology and, again, Mathematics. This last subject is, of course, not one of the natural sciences, but it is a tool used by those sciences. Whatever the practical uses of some of the subjects—such as Mathematics, Political Economy, Psychology—they are taught in this Faculty of the University as a liberal spirit. In this non-professional Faculty the University stresses principles, human values, disciplined, critical, disinterested search for all the facts and for the most adequate theories.

In the medieval university the Faculty of Arts was the oldest. It was the nucleus around which, in course of time, gathered the other Faculties, such as Medicine, Law, Theology. To these more specialized Faculties students were not admitted without having gone through Arts. The University of Alberta has had a similar history. The first Faculty here was Arts and Science. Later came Law, Applied Science and Medicine and, still later, Agriculture and Education. Medicine and Law both require that their students shall study for one or two years in Arts and Science before entering upon their professional studies.

But the Faculty of Arts and Science is not merely a service Faculty. For that very large number of our students who desire education for its own sake, who wish to live intelligently and usefully to become intelligent citizens of the world, the Faculty of Arts and Science reserves its richest offerings. Students aim, who wish to know special subjects like Physics, English Literature or Botany or Philosophy or Mathematics in a more thorough and profound way than is necessary for such training as may lead to the practice of medicine or law or other professions, make the Faculty of Arts and Science their intellectual home. Such students may either take Honours courses, which permit them to specialize early but involve an additional year of study, or they may register after receiving their Bachelor's degree for the degree of Master of Arts or Master of Science in one subject. These are the students who are likely after graduation to proceed to other universities where more equipment and larger libraries are available and to study there for the degree of Doctor of Philosophy. This advanced training will prepare them to teach in a university or to pursue research.

At the University of Alberta, two professional schools, Commerce and Household Economics, are part of the Faculty of Arts and Science

School of Commerce—Boys and girls who are looking forward to a career in business, whether as managers of firms, or trade representatives in foreign countries, as government or business administrators, as accountants or as secretaries will receive a useful training in the School of Commerce—all the more useful if preceded by one or two years of broad, general education in Arts and Science. It should be added that the training afforded by the Faculty of Law is also an excellent preparation for a business career. And for certain kinds of business, some men have profitably taken a course in Arts and Science and then have gone on to Civil Engineering.

School of Household Economics.—Girls who wish to become dietitians, teachers and research workers in Household Economics, writers and publicists dealing with the subjects of food, materials, marketing, etc., and—perhaps most important of all—girls who wish to become capable and well-informed homemakers, will all find the sort of training they need in the School of Household Economics.

Finally, it may be emphasized that the chief work of the Faculty of Arts and Science is to give its students a broad foundation of general learning and information. None of the courses outlined above completes a student's education. He will learn methods of study; he will learn something of the great ideas and the great men both of the past and present. If his appetite for learning has been sharpened, if his curiosity has been awakened, if he wants to go on searching and finding, then his time in the Faculty of Arts and Science has been well spent.



Faculty of Law

"Where law ends, tyranny begins."

WILLIAM PITT, Earl of Chatham

Without the legal profession, society would fall apart, in fact, it might explode apart! And this is especially true in a democratic society. The law holds the balance between men and man, and stands, if not for absolute justice certainly for as close an approximation to justice as is possible among men. It stands for reasonable working arrangements. It helps men to live together.

Let us take a quite ordinary case of law and see what is involved in it. At the time when preparations were being made for the coronation of Edward VIII a man (A) who owned property on the route of the coronation procession, rented rooms from which the procession might be seen. Another man (B) paid in advance a large sum of money for the privilege of taking a party to see the procession from those rooms. Then, as you know Edward VIII gave up the throne and was not crowned.

It is clear that both men have a grievance. B says that there was no coronation procession and that therefore his money should be returned. A says that he rented the rooms in good faith and that he did not promise that there would be a procession. In fact says A, in renting the room B took the whole risk. But, says B, the rooms were obviously of no value to me if there was to be no procession. I took them on the implied understanding that there would be a procession. A replies that he was under some expense to make the rooms suitable for the purpose for which they were rented, and should therefore retain the rental for re-embourment. Then both of them look for satisfaction elsewhere. They turn on the Government and say "You promised a procession, therefore you must satisfy us both." The Government replies, "I wasn't even a party to your agreement, which was completely between the two of you." How is such a case to be settled?

In a conflict like this—and thousands could be quoted—full satisfaction for both claims is unsustainable. But we must

have some means of settling disputes, otherwise, anarchy comes in, anarchy means and almost before you can say Jack Robinson, there are looting and violence. Society as a whole has a stake in this matter of disputes for the ignorant bystander has a right not to be afflicted by them. And when a society is lawless, there is no security for anybody. You will have read of the violent conditions of the frontiers and of other places where society is not controlled by law. We soon discover that we must create rules of law by reference to which all disputes can be settled with as much justice for all parties as can reasonably be obtained.

In a democracy the laws are a body of rules which the citizens, through their representatives in parliament, have a share in making and by which they order their lives. It is the laws accepted and obeyed by the citizens which hold society together. We obey most of them as naturally as we wear our clothes and we look to them for protection against the few members of the community who will not play the game according to the established rules, who are as we say, law-breakers. In return for such protection we give up certain rights which we should no doubt exercise in a lawless country. If a man driving on the wrong side of the road approaches my car I go to see a lawyer instead of reaching for a shotgun. We leave it to the lawyer and to the judge or magistrate before whom he argues the case to protect our rights. When the different countries of the world are willing to try these disputes and differences before some great court and to accept its decision, whether irreversible or reversible when that time comes, we shall have international law in place of war.

Lawyers need a broad education and quick alert minds. They must be able to enter into and understand the lives and problems of the people who come to them with their troubles. Today a lawyer may be busy with a dispute between an hydraulic engineering firm and an individual who claims that the firm has infringed his patents; he must be able to understand what the quarrel is about. Tomorrow he may be called upon to argue in a case involving harmful drugs and their effect on the human body. For that reason, at the University of Alberta, the course toward the degree of LL.B. Bachelor of Laws, requires three years of legal studies after the B.A. A "combined" course may be taken in five years.

It is a common misconception that lawyers do nothing but argue in court. As a matter of fact many lawyers encourage their clients to settle matters "out of court"—and other lawyers

do legal work which seldom brings them into court. There are many types of legal practice. There are corporation lawyers and criminal lawyers and constitutional lawyers and many other sorts. Many corporations employ lawyers simply to draw up their multitudinous agreements and to handle their business, so that they may always be sure of not infringing the law. Many men who intend to make a career of business, study law as a preparation—and, indeed, no better preparation for many business careers could be had, for the student who has successfully completed his five or six years for the B.A. and LL.B. should begin to have a clear picture of society and industry and business. Legal training becomes more and more necessary for legislators; and therefore boys and girls who hope to go into parliament would be well advised to consider the study of law. Legal training is valuable also for those not in parliament but engaged in active organization work for any of the political parties. Such training is almost necessary for those who wish to enter the diplomatic service or to act as foreign representatives of Canadian firms. And, as governments become more and more involved in social responsibilities towards an increasingly intricate society, more and more of this government work has to be turned over to the administrative bodies which need the services of men with legal training or judicial experience.



The Faculty of Applied Science

*We were taken from the anvil and the anvil,
We were melted in the furnace and the pit—
We were cut and wrought and hammered to shape.
We were cut and filed and tested and gauged to fit
Some water, coal and oil is all we ask,
And a thousandth of an inch to give us play,
And now if you will set us to our task,
We will serve you four and twenty hours a day!*

KENNEDY

The Faculty of Applied Science trains men—and occasionally women—to be engineers. Everybody knows the importance of engineering in the world of today both for peace and for war. It is the engineers who have made possible the great trains which every day, in all weathers, carry passengers and supplies and mail from Halifax to Vancouver and from Vancouver to Halifax who have devised the aircraft which have linked the far North with civilization, who have given us the radio, the Alaska Highway, the skyscraper, the battleship.

There are different kinds of engineers. The civil engineer (he was originally called civil to distinguish him from the military engineer) builds roads and bridges and dams and tunnels; the mechanical engineer invents, constructs, and controls great and small machines; the electrical engineer has given us the telephone and the street-car and has lighted our houses and cities; the mining engineer has made it possible to extract coal and oil and precious metals from the earth; the chemical engineer designs, builds, and operates plants which manufacture industrial chemical products.

There is something of romance in the power, the speed, the vastness and the precision of engineering achievements. You may remember the indignation of the Scotch ship's engineer in Kipling's poem when one of the passengers asked him if he did not think that steam had stripped the sea of romance:





Professor: These first-class passages they like to very well.
Poet: And hoped to little books, but why don't poets tell?
I'm sick of all their quips and turns—their love and doves they dream—
Lord, send a man like Robin Hood to sing the song of steel!

But the wonders wrought by the engineers which have changed the face of the world and transformed our way of life are the result of long patient work of laborious calculations, of knowledge gained from text books by years of study of mastery of the principles of physics and other sciences and above all of mathematics. If you are thinking of entering the Faculty of Applied Science look to your mathematics. Without mathematics the thing is hopeless. If you have no skill in or liking for mathematics engineering is not your game. Mathematics is the indispensable tool. So if you feel attracted by the romance and marvels of engineering remember that that romance and those marvels are built on a solid granite foundation of mathematics and drive again at your geometry, your trigonometry and your algebra. And of course do not forget your physics and chemistry for they too are part of the foundation on which your engineering course at the University will rest. Mathematics and basic sciences these are the gates through which you must pass if you wish to travel the road which leads to the degree of Bachelor of Science in any branch of engineering.

The University of Alberta offers courses in Applied Science leading to the B.Sc. degree in civil, chemical, electrical, or mining engineering. Each of these courses takes four years. The first year is the same for all students. At the end of the first year the students are divided into two groups: those who wish to be chemical or mining engineers and those who wish to be civil or electrical engineers. In the last two years each of the courses is more specialized.

Students of the university who wish to continue their study in branches of engineering (such as mechanical) in which the equipment for third and fourth year work is not yet available have many times their credits at certain other Canadian universities, where they will be given credit for the work done in Alberta.

Faculty of Medicine

"I will use treatment to help the sick according to my ability and judgement, but I will never use it to injure or wrong them. I will not give poison to anyone though asked to do so. In purity and holiness I will guard my life and my art. Into whatever houses I enter I will do so to help the sick, keeping myself free from all unwholesome wrong doing and harm. Whichever is the master of my practice I will obey (or even expand my practice in secret movements) that might never to be published abroad. I will not divulge, but remember each thing, to be told to others. Even if I keep this oath and break it now, may I enjoy happiness in my life and art among all men for all time, but if I transgress and forswear myself, may the opposite befall me."

FROM THE OATH OF HIPPOCRATES

Medicine is a profession, one of the oldest and most honorable and the oath of Hippocrates summarizes the "religion" of medical men today just as it did in the time of Hippocrates twenty three centuries ago. At many medical schools students still swear adherence to the oath of Hippocrates on graduation.

People do not like the idea of "just anybody" tinkering with their bodies in either health or sickness. Therefore the course of training for doctors is long and arduous. After matriculation, the student has seven years to go before he can practice medicine. First there are two years in Arts and Science then five years in medicine of which the last is an undergraduate internship in a hospital. Unless he can reach an average of sixty or sixty five percent in the matriculation examinations and in Arts and Science the student is not accepted for Medicine at all. In addition, since the equipment of the Faculty of Medicine at the University of Alberta is limited, only so many students are accepted each year, there is a strict quota. Only the best and most promising are taken. By these requirements, the Faculty of Medicine carries out the mandate of the people of the Province that only persons genuinely qualified in every way to do so shall be permitted to practice medicine.

After receiving their degrees, graduates in Medicine may either practice or pursue other studies in order to become specialists, or surgeons, lung specialists, brain specialists, nerve specialists, etc. Some graduates do not practice as physicians at all, but become teachers of medical subjects or research workers. Some practice and teach, and a few add research to practice and teaching. To these persons we are deeply indebted. In research work, the University of Alberta's Faculty of Medicine has taken an honorable part. It even had a share in one of the great discoveries of modern times, that of insulin, which is used in the treatment of diabetes, it was a professor of the University of Alberta who set insulin free from other compounds, and made it available for use as a pure or uncontaminated drug.

The Canadian Medical Association and the American Medical Association exercise a careful supervision over both hospitals and medical schools and publish their ratings of these institutions. The University of Alberta has held the highest rating—A—since the very beginning. The rating is based partly on facilities and partly on the quality of the staff. By virtue of this "A" rating, a student who enters Medicine at the University of Alberta can be sure that he will receive good preparation for his life work.

Just as two professional schools are associated with the Faculty of Arts and Science, so three schools—Dentistry, Pharmacy and Nursing—are associated with the Faculty of Medicine.

The School of Dentistry.—This School offers thorough training in the various branches of Dentistry. The degree in Dentistry may be earned in five years after matriculation, one in Arts and Science and four in Dentistry or by a Combined course—two years of Arts and four in Dentistry. Like students in the M.D. course, those in Dentistry must make an average of sixty or sixty-five percent in their courses in Arts and Science.

The School of Nursing.—The degree of B.Sc. in Nursing requires five years, but a diploma in Nursing may be obtained in three years after matriculation. The graduates of the shorter course serve in hospitals as general duty nurses, in doctors' offices and in private homes. The degree course graduates have open to them, as well, the various branches of public health nursing (district, school, and industrial nursing, and service in the Victorian Order of Nurses), teaching in

hospital training schools, supervisory and administrative positions, and research.

The School of Pharmacy.—Before entering the School of Pharmacy, students must have served such minimum term of apprenticeship in the employ of a duly qualified pharmacist as may be required by the Council of the Alberta Pharmaceutical Association. Thereafter, they may gain a Diploma in Pharmacy in two years, or a B.Sc. in Pharmacy in three years.







The Faculty of Agriculture

*"As for the Necessity of this Art, it is evident enough, since
the can live without all others, and no one other without
the"*

*"The three first Men in the world were a Gardener, a Plough-
man, and a Granger."*

AMERICAN COLORED

In a great farming and ranching country like Alberta it is obvious that the provincial University should have a Faculty of Agriculture. No duty is more plainly laid upon each generation of Alberta citizens than the duty of handing on to their successors a heritage not only unspoiled but also enriched. And no part of this duty is clearer or more important than that of treating the actual soil of the province with respect and intelligence. Researches carried on in the University laboratories and at the University farm have solved and will solve many of the problems of the farmer and rancher and the graduates of the Faculty of Agriculture carry out from the University every year to the different parts of Alberta new skills and new ideas to the benefit of themselves and others. It was said over two hundred years ago that "whoever could make two ears of corn or two blades of grass to grow upon a spot of ground where only one grew before" deserved well of mankind. He is still well thought of.

The Faculty of Agriculture works by the courses it offers and by the experiments and researches which it carries on to make the growing of crops and the raising of stock in this Province more skillful and more profitable. Students are trained in the scientific principles of agriculture. They are taught the planning of farm buildings and farmsteads, the use and value of different kinds of farm machinery. They learn how to distinguish and judge and breed different types and classes of beef cattle, dairy cattle, horses, sheep, and swine. They study the principles of crop production, the nature of different soils, the diseases of plants, the control of weeds. They receive instruction in the principles and problems of dairying. There are courses in poultry breeding and veterinary

science; in the problems of agricultural marketing and in statistics.

The degree of B.Sc. in Agriculture is granted upon the successful completion of a four-year course. In the third and fourth years a student may follow a general course which has been planned to provide a broad training in Agriculture, or he may, if he prefers, narrow his course and do a certain amount of specialization in some particular branch of Agriculture, such as Field Crops, Animal Husbandry, Soils, and so forth. A student deeply interested in some one branch of Agriculture, may, if he has the inclination and the ability, go on, after taking his B.Sc. degree, to do more advanced and specialized work for the degree of M.Sc.

Different kinds of work are open to the graduate in Agriculture. He may apply what he has learned to the business of practical farming, and find in such work livelihood, interest, and an opportunity for public service. He may become an extension worker in the employ of either the Provincial or the Dominion Government, a man whose job it is to assist the farmers of his district with advice and information. Other graduates may become teachers in the Provincial Schools of Agriculture. There is also work to be done by trained men for such organizations as the Grain Companies and the Canadian Wheat Board and for the companies which make and sell farm machinery, and for those with the right kind of ability there is research work with the aid and encouragement of such bodies as the National Research Council.



Faculty of Education

"And gladly would he leave and gladly tarry"

CHANNING

Youngest of the faculties at the University the Faculty of Education stands for one of the oldest professions. All of the professions are necessary to society, without them society as we know it could not exist. Without engineers men society would soon be ravaged by epidemics and only the strongest, or luckiest could save the population of the world would be put in hell in no time. Without lawyers we should not be able to count on order and security. Without the engineer life would become bare and miserable. But without teachers, men would revert to wild beasts.

To teachers is entrusted one of the most sacred of all human employments. On their rests in large measure the whole burden of civilization. Sometimes we hear of "self-made men." The self-made man is a myth often heard of never seen. There is no such thing. Not a child in the wilderness and he will not grow into a self-made man. Even the simplest and most elementary things must be taught for nothing is so helpless as a human baby. If you should ever meet a man who claims to be self-made ask him a simple question. "Can you read and write?" In the background of all progress and all achievements stands always a teacher. Of many teachers and capable people are grateful to them.

In new provinces such as Alberta there have been so many things to do with public money that teachers have suffered in comparison with many persons in other professions. We have been very practical and have thought a new telephone line more important than a fine school with capable teachers. But in reality nothing is more practical than making the teaching profession attractive enough to draw into its ranks well-trained and skilled men and women of good character. It should be attractive enough, for example to make the student of scientific bent consider whether he might not use his gifts in teaching rather than in industry. As time goes on teachers will become more and more important. They are bound to have a great share in building the new world we all expect after the war. Nobody can afford to be indifferent to the quali-

efforts of teachers and to the encouragement they receive from society.

The Province of Alberta needs well-trained teachers for all the stages from kindergarten to the last years of high school. It must be insisted on that teachers of the primary grades have a very important job and that equal to none, done without special training and knowledge. Such teachers should be well qualified in elementary science, hygiene, study, elementary mental study. They should have rather few limitations, with history and geography—the kind of knowledge which will enable them to interest young children in plants, insects and other animals in the living things they are around them. These teachers should also know something about history, geography, and child psychology; they should have enough to draw games for the children which will be interesting in games, but which they can substitute with something. These teachers profit by having a university degree. It is an excellent thing to insist that the teaching in the lower grades may be left to teachers with slight and haphazard training. It may indeed be left to such teachers, but not safety. The children and therefore the Province will pay the price for such makeshift methods and such hazy competence. We should look forward to the day when every teacher in Alberta will hold a university degree or is on the way to gaining one.

This is the goal. We are not there yet. But in the meantime if you wish to be a teacher and yet do not see how you are to manage a full course at the university, come at least for as long as you wish. If you do work in your first year and may be found to enable you to return. Upon the successful completion of two years' work in the Faculty of Education, you will have earned certain teaching privileges, and at the end of the third or fourth year further privileges. Remember also that it is allowable to interrupt your course to stay out for a year or more and then to return.

There is much choosing to be done between different courses and degrees. The details of the different courses cannot be set out here. You will find them in the catalogue of the Faculty of Education. There is the course leading to the degree of Bachelor of Education. There are two variations of this course, recently established, which will no doubt be of special interest to some students, one leading to a degree of Bachelor of Education in Agriculture and one to that of Bachelor of Education in Household Sciences. And finally, there are the continued courses leading to the degrees of Bachelor of Arts or Bachelor of Science and Bachelor of Education.

The School of Graduate Studies

The School of Graduate Studies is for those students who wish to do more advanced and specialized work in some subject than is possible in the undergraduate years. In the School are students from several Faculties proceeding to the degree of Master of Arts, Master of Science, or Master of Education. The usual time required to complete work for the Master's Degree is two years. Those who, as undergraduates, have followed an Honors Course may obtain the degree in one year. Normally the work consists of taking courses in the chosen subject and also the carrying out of some piece of research work. The student is required to prepare a thesis describing the results of his investigation.

A more detailed statement of the rules and regulations governing graduate work may be found in the section devoted to the School of Graduate Studies in the Calendar of the University: General Section.



Further Information

COURSES OF STUDY

Further information as to courses of study and other matters may be found in the separate University Calendars relating to:

- The Faculty of Arts and Science, including The School of Household Economics
- The Faculty of Agriculture
- The Faculty of Applied Science
- The Faculty of Education
- The Faculty of Law
- The Faculty of Medicine
- The School of Dentistry
- The School of Nursing
- The School of Pharmacy
- The School of Commerce

There is also a Calendar containing General Information, including a section on the School of Graduate Studies. These Calendars may be obtained by writing to the Registrar, University of Alberta, Edmonton.

If the Calendar does not give all the information desired, you should write to the Dean of the Faculty concerned.

FINANCIAL ASSISTANCE

Scholarships of various kinds are available. Specific information regarding them will be supplied by the Registrar of the University.

LIVING ACCOMMODATION

Some information as to board and lodging will be found in the Calendars mentioned above. If you wish further information, you may write to the Bursar of the University.

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